

AMENDMENTS TO THE CLAIMS

Amendment to the Claims:

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims:

Claim 1 (Previously presented): Spherically shaped potassium doped pyrogenically produced metal or metalloid oxide particles having a breadth of distribution of particle size of at least 0.7 and having uniformly distributed potassium from about 0.03% to 20% by weight and which are doped by means of aerosol with a potassium salt solution, characterized in that the spherically shaped pyrogenically produced particle base component is produced by flame oxidation or flame hydrolysis and wherein the doped oxide particles have a BET surface between 1 and 1000 m²/g, and wherein the pH of a 4 % aqueous dispersion of the doped particles is more than 5.

Claim 2 (Cancelled)

Claim 3 (Previously presented): The pyrogenically produced oxides of metals or metalloids in accordance with claim 1, further characterized in the absorption of dibutylphthalate does not allow any end point to be recognized.

Claim 4 (Previously presented): A method of producing potassium-doped pyrogenic oxide spherical particles having a uniformly distributed potassium content of more than about 0.03% by weight and having a breadth of the distribution of particle size of at least 0.7 comprising,

A) sequentially feeding a gaseous mixture, including a pyrogenic oxide precursor, and an aerosol to form an aerosol-gaseous mixture, which is fed into a flame under conditions suitable for producing pyrogenic oxides by flame oxidation or flame hydrolysis from the precursor, to form the potassium-doped pyrogenic oxide spherical particles having a uniformly distributed potassium content of more than 0.03% by weight, and

B) recovering the formed pyrogenic-doped oxide spherical particles, which have BET surface of the doped oxide is between 1 and 1000 m²/g and the breadth of distribution of particle size of at least 0.7, from the reacted aerosol-gaseous mixture,

wherein the aerosol is homogeneously mixed before the reaction with the gaseous mixture and is prepared from a potassium chloride salt solution having a concentration of more than 0.5% by wt.

Claim 5 (Previously presented): A composition comprising the doped pyrogenic oxides of claim 1.

Claim 6 (Previously presented): The method of claim 4 wherein the aerosol is produced by atomization by means of an aerosol generator.

Claim 7 (Previously presented): The method of claim 6 wherein the atomization involves a gas-atomizing (two-fluid) nozzle method.

Claims 8 and 9 (Canceled)

Claim 10 (Previously presented): A method of producing potassium-doped pyrogenic oxide spherical particles with a breadth of the distribution of particle size of at least 0.7 and a uniformly distributed potassium content of more than about 0.03% by weight consisting of,

A) sequentially feeding a gaseous mixture, including a pyrogenic oxide precursor, and an aerosol to form an aerosol-gaseous mixture, which is fed into a flame under conditions suitable for producing pyrogenic oxides by flame oxidation or flame hydrolysis from the precursor, to form the potassium-doped pyrogenic oxide spherical particles having a uniformly distributed potassium content of more than 0.03% by weight, and

B) recovering the formed pyrogenic-doped oxide spherical particles, which have BET surface of the doped oxide particles is between 1 and 1000 m²/g and have a breadth of the distribution of particle size of at least 0.7, from the reacted aerosol-gaseous mixture,

wherein the aerosol is homogeneously mixed before the reaction with the gaseous mixture and is prepared from a potassium salt solution having a concentration of more than 0.5% by wt.

Claim 11 (Previously presented): The method of claim 4 further comprising adding oxygen prior to the separation step.